

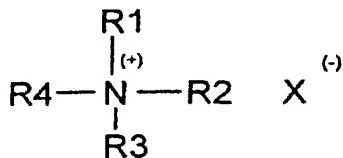
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Original claims 1-23 and amended claims 1-27 are cancelled.

Claim 28 (new): An antibacterial additive for melamine resins, comprising at least one borate salt selected from the group consisting of the salts of orthoboric acid H_3BO_3 , of metaboric acid HBO_2 and of polyboric acids $H_{n-2}B_nO_{2n-1}$ as active antibacterial compound and, further comprising at least one quaternary ammonium compound of the formula



with $R_1, R_2, R_3 = C_1-C_5$ alkyl, $R_4 = C_1-C_{20}$ alkyl or benzyl, it being possible for R_1, R_2, R_3 and R_4 to be identical or different, and $X =$ chloride or bromide,

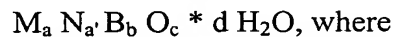
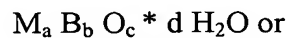
wherein

at least one borate salt is of the formula $Zn_aB_bO_c \cdot dH_2O$ with $a = 1$ or 2 , $b = 1$ to 8 ; $c = 1$ to 13 and $d = 0$ to 10 .

Claim 29 (new): The antibacterial additive for melamine resins of claim 28, wherein the melamine resins are formed by condensation of melamine, or of mixtures of urea with melamine with aldehydes, or of mixtures of aldehydes, including formaldehyde, acetaldehyde, trimethylolacetaldehyde, acrolein, benzaldehyde, furfural, glyoxal, glutaraldehyde, phthalaldehyde, terephthalaldehyde, and isobutyraldehyde, or of acetone, or of ketones, including methyl ethyl ketone and diethyl ketone.

Claim 30 (new): The antibacterial additive for melamine resins of claim 28, wherein the melamine resins are etherified by reaction with C₁-C₄ alcohols, or etherified by reaction with C₁-C₄ alcohols and subsequently transesterified with C₄-C₁₈ alcohols or diols or both, or etherified by reaction with C₁-C₄ alcohols and partly reacted with bisepoxides.

Claim 31 (new): The antibacterial additive for melamine resins of claim 28, further comprising at least one borate salt of the formulae



$$a, a' = 1 \text{ or } 2$$

$$b = 1 \text{ to } 8$$

$$c = 1 \text{ to } 13$$

$$d = 0 \text{ to } 10$$

M, N = NH₄, Na, K, Li, Ca, Mg and where

M, N, a and a' may be identical or different.

Claim 32 (new): The antibacterial additive of claim 31, wherein at least one borate salt is Na₂B₄O₇ · dH₂O where d = 0, 5 or 10; NaBO₂ · dH₂O where d = 2 or 4; NaB₅O₈ · 5H₂O; Na₂B₈O₁₃ · 4H₂O; Ca₂B₆O₁₁ · 5H₂O; NaCaB₅O₉ · dH₂O where d = 5 or 8; LiBO₂ · 8 H₂O; LiB₅O₈ · 5H₂O; Li₂B₄O₇ · 3H₂O; K₂B₄O₇ · 4H₂O; KB₅O₈ · 4H₂O; NH₄B₅O₈ · 4H₂O; (NH₄)₂B₄O₇ · 4H₂O · 4H₂O; Zn₂B₆O₁₁ · dH₂O where d = 3.5, 7-7.5, 9; or ZnB₂O₄ · 2H₂O.

Claim 33 (new): The antibacterial additive of claim 28, wherein at least one borate salt is technical zinc borate ZnO · B₂O₃ · dH₂O with ≥ 45% by weight ZnO and ≥ 36% by weight B₂O₃.

Claim 34 (new): The antibacterial additive of claim 28, wherein at least one borate salt is technical sodium borate Na₂O · B₂O₃ · 10 H₂O.

Claim 35 (new): The antibacterial additive of claim 28, wherein the only sole borate salt is technical zinc borate $\text{ZnO} \cdot \text{B}_2\text{O}_3 \cdot d\text{H}_2\text{O}$.

Claim 36 (new): The antibacterial additive of claim 33, wherein the amount of borate salt is 0.1% to 3% by weight, based on the amount of solid melamine resin.

Claim 37 (new): The antibacterial additive of claim 33, wherein the amount of borate salt is 1% to 2.5% by weight, based on the amount of solid melamine resin.

Claim 38 (new): The antibacterial additive of claim 33, wherein the amount of borate salt is 1.8% to 2.2% by weight, based on the amount of solid melamine resin.

Claim 39 (new): The antibacterial additive of claim 28, wherein at least one quaternary ammonium compound is benzalkonium chloride.

Claim 40 (new): The antibacterial additive of claim 39, comprising technical zinc borate $\text{ZnO} \cdot \text{B}_2\text{O}_3 \cdot d\text{H}_2\text{O}$ and benzalkonium chloride in a weight ratio of 2:1.

Claim 41 (new): The antibacterial additive of claim 40, wherein the amount of technical zinc borate and benzalkonium chloride is 0.1% to 1% by weight, based on the amount of solid melamine resin.

Claim 42 (new): The antibacterial additive of claim 40, wherein the amount of technical zinc borate and benzalkonium chloride is 0.2% to 0.6% by weight, based on the amount of solid melamine resin.

Claim 43 (new): The antibacterial additive of claim 39, comprising technical zinc borate $\text{ZnO} \cdot \text{B}_2\text{O}_3 \cdot d\text{H}_2\text{O}$ and technical sodium borate $\text{Na}_2\text{O} \cdot \text{B}_2\text{O}_3 \cdot d\text{H}_2\text{O}$ with $d = 10$ and benzalkonium chloride in a weight ratio of 2:2:1.

Claim 44 (new): The antibacterial additive of claim 43, wherein the amount of technical zinc borate and technical sodium borate and benzalkonium chloride is 0.1% to 1% by weight, based on the amount of solid melamine resin.

Claim 45 (new): The antibacterial additive of claim 43, wherein the amount of technical zinc borate and technical sodium borate and benzalkonium chloride is 0.2% to 0.6% by weight, based on the amount of solid melamine resin.

Claim 46 (new): An antibacterial melamine resin comprising an antibacterial additive of claim 28.

Claim 47 (new): A process for producing an antibacterial melamine resin, wherein an antibacterial additive of claim 28 is mixed with a melamine resin present in dissolved form, the additive being admixed to the melamine resin in solid or liquid form or both to give an antibacterial melamine resin in suspended form which subsequently, directly or following conversion into a solid resin, is processed further at a later point in time.

Claim 48 (new): The process of claim 47, wherein the antibacterial additive is admixed during the melamine resin synthesis after the melamine resin precondensate obtained in the melamine resin synthesis has cooled.

Claim 49 (new): The process of claim 47, wherein the antibacterial additive is admixed after the melamine resin synthesis, the admixing taking place to a melamine resin present in dissolved form as a liquid resin, or, where a solid resin is present, the admixing taking place after the solid resin has been converted into the dissolved form.

Claim 50 (new): The process of claim 47, wherein the borate salt present in the additive is mixed with the melamine resin together with or after or before the quaternary ammonium compound.

Claim 51 (new): An antibacterial laminate comprising an antibacterial melamine resin of claim 28.

Claim 52 (new): A process for producing an antibacterial laminate, wherein:

- a. a dry absorbent sheetlike structure is impregnated with the antibacterial melamine resin of claim 28 present in dissolved form,
- b. the antibacterial sheetlike structure thus obtained is dried, and
- c. the dried antibacterial sheetlike structure is pressed with one or more resin-impregnated interlayers or with a support material to form a laminate, and is fully cured.

Claim 53 (new): The process of claim 52, wherein the melamine resin comprises further additives, including wetting agents, release agents, plasticizers, curing agents, or other customary additions.